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| 09/662,337 | 09/14/2000 | Kim B. Roberts | 9-13528-135US KD/bm | 2336 |
| 20988 | 7590 | 08/12/2004 | EXAMINER | |
| OGILVY RENAULT 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A2Y3 CANADA | | | COLLINS, SCOTT M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2145 | 5 |
| DATE MAILED: 08/12/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/662,337

Applicant(s)

ROBERTS, KIM B.

Examiner

Scott M. Collins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-82 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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DETAILED ACTION

1. Claims 1-82 examined
2. It is hereby acknowledged that the following papers have been received and placed of record in the file: Amendment A on 07/21/2004.

Response to Arguments

3. Applicant's arguments filed 07/21/2004 have been fully considered but they are not persuasive. Applicant agrees that "Bencheck teaches the insertion and extraction of performance monitor information" (Amendment A page 16, 2nd paragraph), but states that this is only "into and from the overhead portion of a synchronous frame" (Amendment A page 16, 2nd paragraph) and thus not within the payload portion as stated in the claims. However, Bencheck plainly states that the information is contained "within the synchronous payload envelope information payload" (Bencheck column 6, lines 56-57; emphasis added). Thus, Bencheck does indeed teach the claim as written.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bencheck et al., U.S. Patent Number 6,072,777 (herein referred to as Bencheck) in view of Opoczynski, U.S. Patent Number 5,655,068 (herein referred to as Opoczynski).

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6. Referring to claim 1, Bencheck has taught a method of validating a connection mapped through a communications network between first and second end-nodes (Bencheck column 6, lines 3-23), the method comprising the steps of:

- a. at the first end-node, inserting performance monitor (PM) information into a predetermined location within a payload portion of a payload envelope (Bencheck figure 2 and column 6, line 42 – column 7, line 30 where overhead information is inserted.);
- b. transporting the payload envelope through the connection to the second end-node (Bencheck figure 2 and column 6, line 42 – column 7, line 30); and
- c. at the second end-node, extracting the PM information from the predetermined location within the payload envelope (Bencheck figure 2 and column 6, line 42 – column 7, line 30 where overhead information is extracted.).

7. Bencheck has disclosed inserting and extracting overhead information into the payload envelope in a performance monitoring system. However, Bencheck does not expressly disclose that the overhead information contains error and/or error correction information, but only that it can aid in determining a root cause for an error. Opoczynski details a system that inserts error codes into data messages along the downstream and upstream data paths that aid in monitoring the system's performance (Opoczynski abstract). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to expressly utilize the inserted and extracted overhead information for explicit error information as in Opoczynski's system. One of ordinary skill in the art would have been motivated to do this because the overhead information was already being inserted and extracted for performance monitoring in Bencheck's system and it would have been faster and more efficient to also store explicit error information with this information rather than store it elsewhere or recalculate it later.

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8. Referring to claims 2-6 and 19, Bencheck has taught a method wherein the payload envelope is an augmented synchronous payload envelope (SPE) or a converted SONET/SDH SPE having a payload capacity sufficient to accommodate the PM information and enabling the nodes to pointer process the SPE (Bencheck column 2, lines 12-21; column 4, lines 30-45; column 6, lines 3-23; and column 6, line 42 – column 7, line 30).
9. Referring to claims 7 and 8, Bencheck has taught a method wherein each node in the network is adapted to support a plurality of connection layers and the connection is mapped on one of the plurality of connection layers and wherein PM information respecting each layer is inserted into a respective predetermined location of the payload envelope (Bencheck figure 1; column 4, lines 30-45; and column 5, lines 6-18).
10. Referring to claims 9-17, Bencheck has taught a method wherein the step of inserting PM information comprises a step of inserting one or more of a Trace field; a Parity field; an indicator field; and all the necessary space for the fields and the calculated messages themselves (Bencheck column 12, lines 15-31).
11. Referring to claim 18, Bencheck has taught a method wherein the step of extracting the PM information comprises a step of extracting one or more of a trace field; a parity field; and an indicator field (Bencheck column 12, lines 15-31).
12. Referring to claims 20-22, Bencheck has taught a method wherein the step of extracting a parity field further comprises calculating a parity value, comparing the recalculated parity value with the extracted parity value to obtain an error count, and accumulating the error count value for the received data signal (Bencheck column 12, lines 15-31).
13. Referring to claims 23-29, Bencheck has taught a method wherein the step of extracting an indicator field further comprises the steps of monitoring the indicator field for a

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predetermined value in a number of successive data signals (Bencheck figure 2; column 6, line 42 – column 7, line 30; and column 12, lines 15-31).

14. Claims 30-55 do not recite limitations above the claimed invention set forth in claims 1-29 and are therefore rejected for the same reasons set forth in the rejection of claims 1-29 above.

15. Claims 56-70 do not recite limitations above the claimed invention set forth in claims 30-44 and are therefore rejected for the same reasons set forth in the rejection of claims 30-44 above.

16. Claims 71-82 do not recite limitations above the claimed invention set forth in claims 30, and 45-55 and are therefore rejected for the same reasons set forth in the rejection of claims 30, and 45-55 above where receiving is simply the reverse transaction of transmitting.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chen et al., U.S. Patent Number 5,793,976.

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott M. Collins whose telephone number is 703.305.7865. The examiner can normally be reached on Mon.-Thurs. 7:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on 703.308.5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

smc
July 30, 2004



DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2145